



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/722,898	11/26/2003	Lane Smith	P-103786.3 (UTI)	2886

7590 12/08/2006

Daniel D. Chapman, Esq.  
JACKSON WALKER L.L.P.  
112 E. Pecan Street, Suite 2100  
San Antonio, TX 78205

EXAMINER

QIN, JIANCHUN

ART UNIT	PAPER NUMBER
----------	--------------

2837

DATE MAILED: 12/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/722,898	SMITH ET AL.	
	Examiner	Art Unit	
	Jianchun Qin	2837	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on 21 September 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 8, 11, 13-17 and 27-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 8, 11, 13-17 and 27-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date. _____   | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 8 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Behrenfeld (5,986,196).

Regarding claim 8, Behrenfeld discloses a device comprising: a patch (22, 29) comprising a resilient, pliable, adhesive, substantially oil-free body and an integral flexible base (col. 7, lines 11-27 and col. 8, lines 11-19); a second patch (18), the second patch for stacking on the first patch, the first patch for attaching to the vibratable surface (8); and wherein no portion of the patch (18) is positioned on the vibratable surface of the musical instrument at a point of impact (col. 6, lines 9-12; col. 3, lines 62-65).

Regarding claim 11, Behrenfeld discloses the claimed invention. See above and Fig. 2A.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

Art Unit: 2837

the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 13-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rosthauser et al. (5,723,194) in view of Iiyama et al. (JP02003001648A, machine English translation) and Hardy (4,325,280).

Regarding claim 13, Rosthauser et al. discloses a method of making polyurethane coated layers, comprising the steps of: providing a flat surface (col. 13, lines 37-48); applying a polyurethane mix to a flat surface, laying a sheet of base material other than a woven fabric onto the polyurethane mix, and allowing the polyurethane mix to cure (col. 13, lines 37-48, lines 58-62 and col. 15, lines 9-38).

Rosthauser et al. do not mention expressly: releasing the cured polyurethane mix and base material from the flat surface; and applying the cured polyurethane mix and base material to a vibratable surface of musical instrument wherein no portion of the cured polyurethane mix and base material is applied at a point of impact.

Iiyama et al. disclose a method and apparatus for producing polyurethane sheet, and teach the step of providing a release sheet (2) underneath the polyurethane mix (sections 0028, 0029 and 0034), and releasing the polyurethane mix and base material from the release sheet polyurethane mix is cured (Abstract).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the teaching of Iiyama et al. in the invention of Rosthauser et al. in order to provide a technically convenient and robust method for

Art Unit: 2837

producing a polyurethane sheet that contains a polyurethane layer coated on a base material for various usages (Iiyama et al., Abstract and section 0015).

Hardy teaches a device for reducing drumhead ring (Abstract), including: a patch comprising a resilient, pliable, adhesive body and an integral flexible base (col. 3, lines 1-16); and applying the patch to a vibratable surface of musical instrument wherein no portion of the patch is applied at a point of impact (Figs. 1 and 3).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the inventions of Rosthauser et al. and Hardy, in order to make Rosthauser's polyurethane coated patch applicable for sound dampening function for a drumhead (Hardy, col. 1, lines 40-54), wherein the patch has improved adhesion and wet-out properties (Rosthauser et al., Abstract).

Regarding claims 14-16, Iiyama et al. teach: providing a release sheet (sections 0028, 0029); removing any trapped air from the mix prior to curing (sections 0044 and 0045); cutting the cured/mixed sheet to a pre-selected shape (section 0049).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the teaching of Iiyama et al. in the invention of Rosthauser et al. in order to provide a technically convenient and robust method for producing a polyurethane sheet that contains a polyurethane layer coated on a base material for various usages (Iiyama et al., Abstract and section 0015).

Regarding claim 17, the teaching of Iiyama et al. includes: said pre-selected shape is a rectangle (section 0049).

Iiyama et al. do not mention said rectangle has an area between about 1 sq. inch and 12 sq. inches. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to choose an optimum value for the size of the rectangle, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

5. Claims 27-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Behrenfeld in view of Hardy.

Regarding claims 27 and 28, Behrenfeld discloses a device for dampening a vibratable surface of a musical instrument comprising: a patch (22, 29) comprising a resilient, pliable, adhesive body, and an integral flexible base (col. 7, lines 11-27 and col. 8, lines 11-19), wherein the base is foam (col. 7, lines 19-22); wherein the patch includes a top and bottom surface and the foam (29) is closer to one of the top surface or the bottom surface than the other (Fig. 2A).

Behrenfeld does not mention: the patch is positioned on the underside of a vibratable surface of the musical instrument; the patch is positioned on the underside of a vibratable surface at a point other than opposite the point of impact.

Hardy teaches a patch for reducing drumhead ring (Abstract), wherein the patch is positioned on the underside of a vibratable surface of the musical instrument (Figs. 1 and 2); wherein the patch is positioned on the underside of a vibratable surface at a point other than opposite the point of impact (Figs. 1 and 2).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Behrenfeld as taught by Hardy in order to

provide a device for substantially reducing the ringing phenomenon associated with a drumhead while not interfering with the playing of the drum and also presenting a pleasing appearance to the drumhead (Hardy, col. 1, lines 50-54).

Regarding claim 29, Behrenfeld discloses a device for dampening a vibratable surface of a musical instrument comprising: a patch (22, 29) comprising a resilient, pliable, adhesive body, and an integral flexible base (col. 7, lines 11-27 and col. 8, lines 11-19), wherein the base is foam and substantially oil-free (col. 7, lines 19-22; col. 8, lines 11-19).

Behrenfeld does not mention: the patch is positioned on the underside of a vibratable surface at a point other than opposite the point of impact.

Hardy teaches a patch for reducing drumhead ring (Abstract), wherein the patch is positioned on the underside of a vibratable surface at a point other than opposite the point of impact (Figs. 1 and 2).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the invention of Behrenfeld as taught by Hardy in order to provide a device for substantially reducing the ringing phenomenon associated with a drumhead while not interfering with the playing of the drum and also presenting a pleasing appearance to the drumhead (Hardy, col. 1, lines 50-54).

### ***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP §

706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

### ***Response to Arguments***

7. Applicant's arguments filed 01/17/06 with respect to claims 8, 11 and 13-17 have been fully considered but they are moot in view of the new ground(s) of rejection.

Claims 8 and 11 are rejected as new evidence has been found from the Behrenfeld patent to teach the limitations argued by the Applicant. Detailed response is given in section 2 as set forth above in this Office Action.

Claims 13-17 are rejected as new prior art references (U. S. Pat. No. 5,723,194 to Rosthauser et al. and U. S. Pat. No. 4,325,280 to Hardy) have been found to teach, together with the Iiyama et al. reference, the claimed invention recited in the amended claims. Detailed response is given in section 4 as set forth above in this Office Action.

The newly added claims 27-29 are rejected over the combination of Behrenfeld

Art Unit: 2837

and Hardy patents as detailed in section 5 as set forth above.

**Contact Information**

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jianchun Qin whose telephone number is (571) 272-5981. The examiner can normally be reached on 8am - 5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lincoln Donovan can be reached on (571) 272-1988. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JQ

50e

Jianchun Qin  
Examiner  
Art Unit 2837

LINCOLN DONOVAN  
SUPERVISORY PATENT EXAMINER